

**COAST GUARD AVIATION MISHAP**

**CLASS:**

**DATE:**

**AIRCRAFT TYPE:**

**ORIGINAL**

**PART A:**  
**NON-PRIVILEGED INFORMATION**

**PART B:**  
**PRIVILEGED INFORMATION**

NAME OF UNIT  
MODEL/SERIAL NUMBER  
PILOT IN COMMAND  
UNIT CO  
DATE OF MISHAP

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Events sequence charts (Computer animation, video)  
Impact on classified material  
Impact on news media and public

**NOTE: DO NOT INCLUDE LEGAL OPINIONS**

## **I. SYNOPSIS**

(The synopsis page will present a brief summary of the mishap, property damage, injuries, occupational illnesses, deaths, sequence of events.)

## II. FACTUAL INFORMATION

In this section, only factual information and data that relate to the mishap and the personnel involved are presented. All of the listed paragraph titles may not apply to all mishaps. Therefore, whenever a paragraph is deleted, the paragraph numbering will be changed from that indicated. The senior member is expected to streamline the report format by adding or deleting paragraphs to help explain fully the mishap being analyzed. Should there be any questions concerning the report format, contact Commandant (G-KSE).

**A. HISTORY.** (Under this subheading, describe in chronological order the significant sequence of events that preceded the mishap. In some cases this can be achieved by using the radio logs/transcripts as a basis of time. Any evidence that is relevant, regardless of the established fact. A convenient introduction is to give a description of the mission, the departure point, the departure time and the destination. A description of the events could commence with the crew briefing and planning and proceed to departure, weather, navigational sequence of events culminating in the mishap. It is important to give a word picture of the pertinent events and scenarios as they occur and what was known to the personnel involved in the mishap. The mishap site (in lat-long) and the elevation ( if applicable) should be included in this section as well as local time, whether it was day or night, and visibility, etc.)

**B. INJURIES TO PERSONNEL.** Complete the following table (in numbers):

	CREW	PAX	OPERATOR	OTHER
INJURIES	X	X	X	X
FATAL	X	X	X	X
NON-FATAL	X	X	X	X
NONE	X	X	X	X

**C. DAMAGE TO UNIT.** Give a brief statement of the damage sustained by the unit in the mishap. A complete, technical description of the damage will be made in Appendix E of the mishap analysis report.

**D. DAMAGE TO OTHER COAST GUARD PROPERTY:** Give a brief statement of the damage sustained by other CG property. A complete, technical description of the damage will be made in Appendix E of the mishap analysis report.

**E. DAMAGE TO NON-COAST GUARD PROPERTY:** Give a brief statement of the damage sustained by non-CG property. A complete, technical description of the damage will be made in Appendix E of the mishap analysis report.



**F. AIRCREW INFORMATION.** Under this subheading, describe crew and operator qualifications, experience, and previous assignments. This description should provide at least the following:

1. LT I. R. A. PILOT 000-00-0000, USCG, 28 YOM

Designation:	Aircraft Commander
Mission:	Pilot in Command, seated in R/L pilot seat, was/was not at controls.
Total flight hours:	XXXX
HH-52 flight hours:	XXXX
HH-65 flight hours:	XXXX
Standardization Check:	Nov XX
SAR Procedures Check:	Dec XX
Proficiency Course:	Sep XX
Egress:	May XX
HEEDS III:	Jul XX
9D5:	Mar XX

Experience:	
US Navy Flight Trng:	Sep XX, designated Naval Aviator
H-65 Transition Course:	Oct XX, designated copilot
Airsta Yon:	Nov xx - May xx
Upgraded to FP:	Mar xx
Upgraded to AC:	Nov xx
Airsta Hither:	Jun xx - Aug xx
Last Duty:	xx Aug xx, half day off xx Aug xx.
At Mishap Site:	

2. ENS I. R. A. CO-PILOT 000-00-0000, USCGR, 25 YOM

Designation:	First Pilot
Mission:	Copilot, seated in left pilot seat.
Total Flight Hours:	xxxx
HH-65 Flight Hours:	xxxx
Standardization Check:	Sep xx
SAR Procedures Check:	Sep xx
Proficiency Course:	Apr xx
Egress:	Jul xx
HEEDS III:	Jul xx
9D5:	Jun xx

Experience:

US Navy Flight Trng: Sep XX, designated Naval Aviator  
H-65 Transition Course: Oct XX, designated copilot  
Airsta West Coast: Nov xx - May xx  
Upgraded to FP: Mar xx  
Upgraded to AC: Nov xx  
Airsta Here: Jun xx - Aug xx  
Last Duty: xx Aug xx, half day off xx Aug xx.  
At Mishap Site:

3. AD1 I. B. TURNINWRENCHES 000-00-0000, USCG, 29 YOM

Designation: HH-65A Flight Mechanic, Dec XX  
Rescue Swimmer FM designation: Jul XX  
Hours since Jul 92: XXX  
Standardization Check: Dec XX (Syllabus check flight)  
Egress: Jul XX  
HEEDS III: Jul XX  
9D5: Sep XX  
Last Duty: XX Aug XX  
Experience at Mishap Site:

**G. PASSENGER INFORMATION:**

1. Passenger: Fred Flintstone 000 00 0000, Employee of xxxxxxxx  
xxxxxxx Corp.

**H. AIRCRAFT INFORMATION:**

1. HH-65A: CGNR 65xx  
Manufacturer: Aerospatiale Helicopter Corp.  
Date of CG acceptance: 30 Jan 198x  
Hours at acceptance: xx.x hours  
Cycles at acceptance: xx.x cycles  
Location of acceptance: Grand Prairie, TX
2. Damage from previous mishaps: None.
3. Modifications to structure: Only authorized Coast Guard  
TCTO's. All outstanding TCTO's completed.
4. Defects: None noted.

5. Airframe History:

- 01 Feb 198x: Transferred to Air Sta xx, TSN: xx.x hours and xx.x cycles.
- 30 Jun 199x: Transferred to ARSC Elizabeth City, NC, TSN: xxxx hours, TSO: xxxx hours for Programmed Depot Maintenance (PDM).
- 12 Apr 199x: Completed PDM at ARSC, TSN: xxxx hours, TSO: x hours.
- 28 May 199x: Transferred to Air Sta xxxx. TSN: xxxx hours, TSO: xx hours.
- 31 Jun 199x: Aircraft Mishap at Air Sta xxxx, TSN: xxxx.x hours, TSO: xxx hours.

**I. METEOROLOGICAL INFORMATION**

1. Weather forecast:
2. Weather observations at time of mishap:
3. Actual weather along route and at mishap site:
4. Natural light conditions at time of mishap:

**J. AIDS TO NAVIGATION:** Describe the availability of navigation facilities. This information should include the steps taken to establish the serviceability of the facilities at the time of the mishap. List navigation equipment carried and indicate whether an integrated navigation system was installed. Service ability of this equipment should be stated. Details of maps, charts, approach plates, etc., available to crew and appropriate to the route should be included.

**K. COMMUNICATIONS:** Describe the communications facilities available to the aircraft and their effectiveness. All communications with other agencies or vessels (ATC, Navy Oceanic, etc.) relevant to the circumstances of the mishap should be included by reference to communication logs or transcripts of recordings, pertinent extracts of which should be included.

**L. FLIGHT RECORDERS/COCKPIT VOICE RECORDERS:**

Describe everything regarding the condition, location, serviceability, functioning, capacity, parameter coverage, accuracy, and sampling rate that is relevant. If the recorder(s) operated properly, a short statement to this effect is all that is necessary and if not, their shortcomings should be described. The flight recorder/cockpit voice recorder readouts are not normally included in this section but are generally attached to the report as an appendix.

**M. TESTS AND RESULTS:**

Describe the nature of any tests or research undertaken in connection with the mishap and state the results.

1. Engines
2. Mission Computer Unit (MCU):
3. Communications Radios:
4. Engine Torque Transducers:
5. Anticipator Control Box:
6. Anticipator Actuator Motors:
7. Fluid Samples:

HYDRAULIC SERVICE CART  
MIL-H-83282

FE 0	AG 0	AL 0	CR 0	CU 0	MG 0
NI 0	PB 0	SI 0	SN 0	TI 0	MO 0

MGB OIL SERVICE CART  
MIL-L-23699

FE 0	AG 0	AL 0	CR 0	CU 0	MG 0
NI 0	PB 0	SI 0	SN 0	TI 0	MO 0

ENGINE OIL SERVICE CART  
MOBIL 254

FE 0	AG 0	AL 0	CR 0	CU 0	MG 0
NI 0	PB 0	SI 0	SN 0	TI 0	MO 0

SECONDARY HYD RESERVOIR  
MIL-H-83282

FE 0	AG 0	AL 0	CR 0	CU 0	MG 0
NI 0	PB 0	SI 0	SN 0	TI 0	MO 0

MGB OIL FILTER RESERVOIR  
MIL-L-23699

FE 0	AG 0	AL 0	CR 0	CU 0	MG 0
NI 0	PB 0	SI 0	SN 0	TI 0	MO 0

MGB OIL SUMP  
MIL-L-23699

FE 0	AG 0	AL 0	CR 0	CU 0	MG 0
NI 0	PB 0	SI 0	SN 0	TI 0	MO 0

NUMBER 1 ENG #  
OIL FILTER BOWL  
MOBIL 254

FE 0	AG 0	AL 0	CR 0	CU 0	MG 0
NI 0	PB 0	SI 0	SN 0	TI 0	MO 0

NUMBER 2 ENG #  
OIL FILTER BOWL  
MOBIL 254

FE 0	AG 0	AL 0	CR 0	CU 0	MG 0
NI 0	PB 0	SI 0	SN 0	TI 0	MO 0

**N. PHYSICAL EVIDENCE: (WRECKAGE)**

Describe the wreckage. In relatively uncomplicated mishaps the whole of the wreckage examination may be described under this subheading. In major mishap investigations under appropriate sections: e.g., structures, power plants, systems and human factors. The description in each section should embrace the significant facts determined by the group or specialist responsible for the detailed investigation and whose report shall be contained in the mishap report as an appendix.

(This section included numerous photographic references. Also described were the witness marks, ie, rotor blade strikes, wheel marks, marks on the fuselage and how they matched up with certain marks on the tower, etc. Also described damage to the helicopter and how it occurred, whether or not a specific unit was functional during breakage, etc.)

**O. FIRE:** If fire occurred, describe the nature of the occurrence and of the fire fighting equipment used and its effectiveness. Appropriate comments on the training and coordination of personnel should be commented. INFLIGHT-VS-POST CRASH.

**P. SURVIVAL:**

1. Personal Protective Devices

a. Impact Forces: g forces, etc

b. Location of POB:

Pilot in right/left pilot seat.

Copilot in right/left pilot seat.

Flight Mechanic in cabin in fm seat/on gunner's belt.

PAX aft, right cabin troop seat...

PAX aft, left cabin troop seat...

c. Restraint system:

(1) Describe which restraints were used at each position.

(2) Describe how/if the restraints were released, ie the restraints without difficulty...

(3) The ... seat restraints were sent for evaluation to Commanding Officer, Naval Air Warfare Center Aircraft Division, Warminster, PA. 18974-0591 Attn: Greg Reah Code 6024 Tel: 215-441-3729. Results: To be forwarded directly to COMDT G-OAV-3.

d. Helmets:

(1) Describe the type of helmets used and the damage sustained, etc

(2) All helmets were sent for evaluation to Commanding Officer, Naval Air Warfare Center Aircraft Division, Warminster, PA. 18974-0591 Attn: Greg Reah Code 6024 Tel: 215-441-3729. Results: To be forwarded directly to COMDT G-OAV-3.

e. Injuries:

(1) name (Right Pilot seat)

- (a)
- (b)
- (c)

(2) name (Left Pilot seat)

- (a)
- (b)
- (c)

(3) name (cabin)

- (a)
- (b)
- (c)

(4) Passengers:

Mr. Passenger

- (a)
- (b)

Mr. Other Passenger

- (a)
- (b)

2. Egress:

(1) describe egress aspects of each person...



3. Survival gear:

- a. Describe the type of survival equipment worn by each person.

(Describe how each system performed, or if not used, etc)

- b. The pilot's vest...

- c. The Copilot's vest...

- d. The Flight Mechanic's vest...

- e. PAX...

**Q. RESCUE RESPONSE:**

1. Assets responding:

Coast Guard: Group  
Station  
Airsta

P.D.:

2. Rescue chronology: (All times local)

(Reads line by line just like a sitrep.)

**R. UNIT RESPONSE TO MISHAP:**

1. Pre-Mishap Plan:
2. Permanent Mishap Board (PMB):
3. Mishap Analysis Board (MAB):
  - a. The MAB President arrived at CGAS xxx dd mm yy. All other members had arrived...

**S. SALVAGE:**

Briefly describe salvage efforts if any, ie, CGC xxx retrieved the aircraft from the water and transported it to xx docks. The aircraft was then loaded onto a flatbed trailer and stored in an unused hangar... The Mishap Analysis Board took custody of the aircraft at time, dd mm yy and released it to the reporting unit time dd mm yy. The airframe was transported by trailer to ARSC dd mm yy and arrived at ARSC dd mm yy.

Incidental salvage damage is described in The Damage Summary, Appendix G. Salvage Report to be submitted by reporting unit. Excellent salvage effort by all concerned significantly contributed to preservation of evidence.

### **III. ANALYSIS**

#### **A. The Mishap:**

(In the analysis there should be no necessity to repeat any description of the evidence, but the board should review and evaluate the evidence and develop the various patterns and conditions and events that may have existed. This will lead to the formulation of hypothesis that may be tested against the background of evidence. Theories not supported by evidence should be eliminated and explained. The justification for sustaining the validity of the remaining hypothesis or hypotheses should be stated. There should follow a description of the pattern or series of conditions and events that have been determined to have been causal factors in the mishap, and reference should be made to the relevant evidence in support of the argument as it is developed)

The mission had been planned...(this is a good place for a word picture of the mishap)

## **B. Conclusions:**

(Conclusions should indicate which aspects of the evolution were contributory to the mishap and which were not. It is usual to report on certain features in every case, for example:

- The training and experience of the crew.
- The condition or airworthiness of the aircraft.
- The weight and balance of the aircraft.
- Whether there was a pre-mishap failure.

## **C. Causal factor(s):**

(List all causal factors which contributed to the mishap and need to be corrected to keep similar mishaps from occurring. Some causal factors because of their importance or because they can be easily corrected tend to take priority positions. These factors should be described in a concise statement, not an abbreviated description of the circumstances of the mishap. If during the course of the investigation causal factors or additional findings that require immediate or corrective action beyond the unit level are discovered, Commandant (G-KSE) should be notified as soon as possible by telephone or priority message.)

## **D. Additional Findings:**

(Additional items the MAB needs to address, but do not necessarily fit in to the conclusion or causal factors sections descriptions, ie. Subsequent to the mishap hazards.)

#### **IV. RECOMMENDATIONS**

(Make recommendations regarding the possible prevention of future mishaps within the Coast Guard at large. Well thought out recommendations should be short, concise statements that require no explanation. If the report is written properly, the recommendations should follow in a natural sequence after the analysis, conclusion, findings, etc.)

- A. To preclude a mishap:
- B. To prevent secondary damage/injury:

## V. SIGNATURES

CDR X. X. XXXXXX  
Mishap Analysis Board President

CAPT X. X. XXXXXXXX  
Flight Surgeon

LT X. X. XXXXXX  
Engineering Member

LT X. X. XXXXXXXX  
Standardization Member

LT X. X. XXXXXX  
Flight Safety Member

CWO X. X. XXXXXXXX  
Engineering Member

## **VI. INVESTIGATION AND REPORT PREPARATION MAN HOURS:**

31 Aug: X	06 Sep: XX	12 Sep: XX
01 Sep: XX	07 Sep: XX	13 Sep: XX
02 Sep: XX	08 Sep: XX	14 Sep:
03 Sep: XX	09 Sep: XX	
04 Sep: XX	10 Sep: XX	05 Oct:
05 Sep: X	11 Sep: XX	06 Oct:

## **VII. REPORT DISTRIBUTION:**

Original:	G-WKS-1, via reviewing chain.
Copy 1/unit file	Unit file
Copy 2/Senior Member	Senior Member
Copy 3/G-WKS-1	G-WKS-1 (advance with CO's endorsement)
Copy 4/G-OCA	G-OCA (advance with CO's endorsement)
Copy 5/G-SEA	G-SEA (advance with CO's endorsement)
Copy 6/G-WKH	G-WKH (advance with CO's endorsement)

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Color photocopies of all photographs, both black and white and color, look better, are easier to manage, and take up less space than actual photographs for all copies of the report, including the original. The contrast, color, etc, may be adjusted for each photocopy to achieve satisfactory results.

A normal 3x5, or 4x6 photo can be enlarged to a 5x7, 8x10, or even 11x17 with this method, quickly and easily. The 11x17 is an excellent size for a wreckage diagram. An aerial photo will support this quite well.

Once the written report is finalized, the photos can be organized and mounted (via glue stick) to paper. Heavier paper works better. A numbering sequence can then be affixed to the paper. For less significant photos, two 4x6 size photos can be mounted to paper and copied at that size.

For more significant photos where a larger photo is desired, a 4x6 size print need not be mounted to paper. Simply keep track of it with a number and place it in the order to appear in the report. The person who photocopies it will place the photo on the copier and enlarge it as desired. Having it mounted may interfere with this somewhat.

Blue rollerball type pens work extremely well for marking the face of photographs. Allow the ink to dry for several seconds prior to touching it. Paper may be place on top of the ink to absorb any excess and prevent a smudge.

Photos supporting the Privileged section may be placed in the folder on the side of the privileged information so the report may be read and the photographs can be viewed simultaneously. The same hold true with the Non-Privileged side.

Color photocopies are readily available at local printing shops or larger print shops like Kinkos, etc. Blue Print shops also have this capability. They will generally give a very significant volume discount.

Attach on the left side of the folder all non-privileged information, i.e., other enclosures, diagrams, photographs, lab analysis report, etc. Place a cover sheet listing enclosures.